WO 2005/052428 PCT/GB2004/004949

## **CLAIMS**

5

10

30

1. A fitting for providing a substantially fluid-tight seal between an opening in a chamber wall and a pipe passing through said opening, said fitting comprising:

- (i) a first portion adapted to extend through the opening in the chamber wall and;
- (ii) a second portion adapted to form a fluid-tight fit with the first portion, both the first portion and the second portion being adapted to allow the pipe to pass therethrough;

characterized in that the first portion is formed from a material adapted to bond to a fibre reinforced plastics material and that the second portion is formed from an electrofusible polymeric plastics material.

- A fitting according to Claim 1, wherein the first and second portions of the fitting overlap for a proportion of their length, the fluid-tight seal between the two portions being formed in that overlapping region.
- A fitting according to any preceding claim, wherein the first portion further
  comprises a flange, extending radially outwardly from the body of the first portion, a first surface of the flange being configured to contact the chamber wall around substantially the whole circumference of the opening.
- A fitting according to any preceding claim, wherein the fitting further comprises
  a sealing means located between the first and the second portions, said sealing means
  being adapted to form a fluid-tight seal between the two overlapping portions.
  - 5. A fitting according to Claim 4, wherein the sealing means comprise an O-ring seated in a circumferential channel around one or other of the portions.
  - 6. A fitting according to any preceding claim, wherein the fitting further comprises an inner tubular portion in the form of a tubular sleeve, formed from a metal, and

WO 2005/052428 PCT/GB2004/004949

adapted to fit tightly inside the fitting in the region in which the first and second portions overlap.

7. A fitting according to any preceding claim, wherein the first portion and the inner tubular portion, if present, is formed from GRP or a metal such as stainless steel, coated steel, brass or a polymer resistant to fuel.

5

10

15

20

- 8. A fitting according to any preceding claim, wherein the fitting further comprises a third portion adapted to form a substantially fluid-tight seal with the first portion, the third portion being formed from an electrofusible polymeric plastics material.
- 9. A fitting according to Claim 8, wherein the first and third portions overlap for a proportion of their length, the fluid-tight seal between the two portions being formed in that overlapping region.
- 10. A fitting according to any preceding claim, wherein said first portion is adapted to accommodate one or more radially extending flanges, said flange(s) being adapted to engage with the chamber wall around substantially the entire circumference of the flange.
- 11. A fitting according to Claim 10, wherein a flange is formed integrally with the first portion.
- 12. A fitting according to Claim 10 or Claim 11, wherein a flange is attached to the first portion by a flange securing means.
  - 13. A fitting according to Claim 12, wherein said flange securing means comprises complementary screw threads on the flange and on the outer body of the first portion.
- 30 14. A fitting according to Claim 12, wherein said flange securing means comprises a bayonet fixing.

WO 2005/052428 PCT/GB2004/004949

15. A fitting according to Claim 12, wherein the flange is a tight sliding fit over the first portion and the flange securing means comprises an adhesive.

- 16. A fitting according to any preceding claim, wherein the second portion
  incorporates heating windings such that the second portion may be electrofused to a pipe or other item formed from an electrofusible polymeric plastics material.
  - 17. A fitting according to Claim 8 and any of Claims 9 to 16 when dependent on Claim 8, wherein the third portion incorporates heating windings such that the third portion may be electrofused to a pipe or other item formed from an electrofusible polymeric plastics material.

10

15

- 18. A fitting according to Claim 3 and any of Claims 4 to 17 when dependent on Claim 3, wherein said fitting further comprises a cover adapted to cover said flange and to encapsulate said flange in an adhesive.
  - 19. A fitting substantially as herein described with reference to and as illustrated in any combination of accompanying drawings 2 to 17 inclusive.